



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,542	05/10/2005	Yoshitsugu Goto	271891US0PCT	6803

  

22850	7590	08/24/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.		
1940 DUKE STREET		
ALEXANDRIA, VA 22314		

  

EXAMINER	
BERMAN, SUSAN W	

  

ART UNIT	PAPER NUMBER
1711	

  

NOTIFICATION DATE	DELIVERY MODE
08/24/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/534,542

Applicant(s)

GOTO ET AL.

Examiner

/Susan W. Berman/

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/05,4/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### ***Specification***

The abstract of the disclosure is objected to because Abstracts are required to be only one paragraph. The present Abstract contains two paragraphs. Correction is required. See MPEP § 608.01(b).

### ***Information Disclosure Statement***

The references cited in the IDS filed 05-10-2005 have been considered to the extent of the discussion in the Search Report for PCT/JP03/14387 since applicant has not provided Abstracts or translations therefor.

### ***Claim Objections***

Claims 7-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Claims 6 depends from claims 4 or 5. Accordingly, claims 7-10 have not been further treated on the merits with respect to depending from claim 6.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The substituents R<sub>1</sub> and R<sub>2</sub> in Formula (1) and in Formula (2) are not defined in the claims. Therefore, the claims are indefinite with respect to the structure of the tertiary amine.

Art Unit: 1711

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-3, 7-10 (when depending from claims 1-3) and 11 are rejected under 35

U.S.C. 102(b) as being anticipated by JP 2002-003751 A, as disclosed in the machine generated translation obtained from the PAJ website. J '751 discloses antistatic hard coating compositions comprising 100 parts by weight polyfunctional acrylate, 50-400 parts by weight of 10-30 nm conductive fine particles. The conductive fine particles can be zinc oxide (see paragraph [0029]). The composition may comprise a photoinitiator [0041]. J '751 further teaches adding 10-80 parts by weight silicon compound and using isopropanol as solvent. With respect to claims 7-10, see paragraphs [0045] and [0068]. With respect to claim 11, see the Examples. Compositions disclosed by J '751 wherein the conductive fine particles are zinc oxide anticipate the instant claims. Compositions disclosed by J '751 comprising parts by weight within the limits set forth in instant claim 2 anticipate the instant claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1711

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-003751 A, as disclosed in the machine generated translation obtained from the PAJ website, in view of Takeda et al (6,200,680). See the discussion of J '751 above.

Takeda et al disclose fine zinc oxide particles having a particle size from 0.005 to 0.05  $\mu\text{m}$  and having a high light diffusing property and useful as particles of a diffuser for back-lighting liquid crystal displays (column 28, lines 17-29). Aliphatic amines and silane coupling agents are taught as surface treating additives. Tertiary amino alcohols, such as diethanolamine, are taught in column 20, lines 37-40, and column 21, lines 66-67. (Meth)acryloxy silanes are taught in column 21, lines 5-13. See column 7, lines 25-37), column 14, lines 9-17, column 15, lines 23-36,, column 16, lines 25-61 and column 20, line 34, to column 22, line 7. in column 50, lines 36-60. A dispersion of the fine particles in a solvent comprising an alcohol is taught in column 51, lines 28-36.

It would have been obvious to one skilled in the art at the time of the invention to employ the dispersions of fine zinc oxide particles having a particle size from 0.005 to 0.05  $\mu\text{m}$  taught by Takeda et al in the analogous compositions taught by J '751. J '751 provides motivation by teaching that the conductive particles in the composition can be zinc oxide particles. Takeda et al disclose that the fine zinc oxide particles having a particle size from 0.005 to 0.05  $\mu\text{m}$  have a high light diffusing property and are useful as particles of a diffuser for back-lighting liquid crystal displays. Thus, One skilled in the art at the time of the invention would have been motivated by a reasonable expectation of providing a composition for an antistatic hard coat in an image display device, as taught by J '751, with a high light diffusing property, as taught by Takeda et al.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hino et al US 2003/0173545 is equivalent to JP 2002-003751.

Suzuki et al (6,319,594) disclose a low reflective antistatic hardcoat film. The hardcoat composition comprises conductive fine particles, such as zinc oxide/aluminum oxide, acrylate monomers, photoinitiator, and reactive silicone compound (column 3, line 18, to column 5, line 47).

Ota et al (5,925,438) disclose compositions for antistatic hardcoats to form a layer of an antireflection film. A low refractive index layer is also provided by coating with a composition comprising fine particles obtained by hydrolyzing silicon alkoxides. The hardcoat composition comprises acrylates, photoinitiator, and ultrafine particles of metallic oxide, such as ZnO (column 3, line 25, to column 5, line 8).

JP 07-175220 discloses an antistatic hardcoat formed from a composition comprising compounds having at least two (meth)acryloyl groups, a photoinitiator and a conductive metal oxide powder having a grain diameter of 0.01 to 0.4  $\mu\text{m}$ .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

Art Unit: 1711

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB  
8/17/2007

/Susan W Berman/  
Primary Examiner  
Art Unit 1711